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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/679,196	10/03/2003	Mohammad Masghati	14342	9681	
7590 04/05/2005			EXAM	EXAMINER	
PAUL F. DONOVAN ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE GLENVEIW, IL 60025			LEJA, RONALD W		
			ART UNIT	PAPER NUMBER	
			2836		
			DATE MAILED: 04/05/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
	Office Astion Commence	10/679,196	MASGHATI, MOHAMMAD			
	Office Action Summary	Examiner	Art Unit			
		Ronald W. Leja	2836			
Period f	The MAILING DATE of this communication apports or Reply	pears on the cover sheet with the c	orrespondence address			
THE - Extending afte - If th - If No - Fail Any	MORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.1 r SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl D period for reply is specified above, the maximum statutory period v ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed  /s will be considered timely.  I the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status						
1)[	Responsive to communication(s) filed on 12 Ja	anuary 2005				
,	<u> </u>	action is non-final.				
3)	•—		osecution as to the merits is			
ال	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dienneir	tion of Claims					
•		la de a annillandian				
4)⊠	Claim(s) 9,11-14,16 and 18-21 is/are pending in the application.					
<b>€</b> \□	4a) Of the above claim(s) is/are withdrawn from consideration.					
'=	Claim(s) is/are allowed.					
_	Claim(s) 9,11-14,16 and 18-21 is/are rejected.					
7)∐ 8)□						
•—		r election requirement.				
Applica	tion Papers					
•	The specification is objected to by the Examine					
10)🖂	) $⊠$ The drawing(s) filed on <u>12 January 2004</u> is/are: a) $⊠$ accepted or b) $□$ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
•	Acknowledgment is made of a claim for foreigr )□ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).			
_	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority document		ion No			
	3. Copies of the certified copies of the prior	• •				
	application from the International Burea	•	-			
*	See the attached detailed Office action for a list	of the certified copies not receive	ed.			
Attachme	nt(s)					
	ice of References Cited (PTO-892)	4) Interview Summary				
	ice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	Pate Patent Application (PTO-152)			
	rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	6)  Other:	and in the last			

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9, 11-14, 16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry (6,266,223) in view of Nabell et al. (6,377,435) and Takeuchi (6,040,972).

Curry discloses (see Fig. 2) a dual stage current limiting surge protector system for protecting telecommunications equipment from power and transient surges comprising input tip and ring terminal pins (30,32), output tip and ring terminal pins (42,46), first voltage suppressor means (134) (a gas tube for Claims 14 & 21); first and second fuse elements (FUSE 5A - in each line), third and fourth current fuse elements (152, 152') and second voltage suppressor means The second voltage suppressor means (140) is disclosed as having a lower breakdown voltage than that of the first voltage suppressor means (134), (see Col. 5, lines 43-52; Col. 6, lines 1-13 and Col. 7, lines 1-3) and wherein the voltage suppressors can be thyristors, avalanche diodes, varistors and TransZorbs (for Claims 12, 13, 19 & 20). It would have been obvious to pick the appropriate suppressor for the particular application, thereby achieving the desired protection results. The choice is dependent upon what elements are chosen for the first thru fourth fuse elements and for

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each of the first and second suppressor means, as all the components work together so as to absorb power and transient surges. Although Curry does not specifically disclose that the first and second fuse elements (FUSE 5A) have a higher rated current value than the third and fourth fuse elements (152, 152'), such would have been recognized by one having ordinary skill in the art, looking at Figure 2 specifically. In other words, if the (FUSE 5A) fuse elements, (the first & second fuse elements), had a lower rated current value than the third & fourth fuse elements (152, 152'), then they would merely fuse to an open condition and the third & fourth fuse elements would never trip and offer their protective features. Therefore, in order to allow the design to function as intended, it would have been obvious for the first and second fuse elements to have a higher rated current value than the third and fourth fuse elements. Furthermore, Nabell et al. teach that there should be a relationship between the first and second current limiting elements to those of the third and fourth current limiting elements for various clamping voltages. Takeuchi teach that current limiting elements (15 & 19) are chosen with higher maximum ratings than current limiting elements (26 & 28) (see Col. 3, lines 39-57). It is therefore, the opinion of the Examiner that it would have been obvious to have the first and second current limiting/(fuse) elements having higher ratings than the third and fourth current limiting elements so that fast rise time of the surge can be handled by the quick-acting second surge suppressor means while the third and fourth fuse elements react and hold the surge

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voltage to a level sufficient to trigger the first suppressor means allowing for the absorption of the remaining surge energy. The first and second fuse elements react to an extended surge for increased protection. Claim 16 requires that the first and second fuse elements are essentially first and second positive thermal coefficient resistors. Curry disclose that the first and second fuse elements are (FUSE 5A) elements, which in essence are slow fuses, that react to increase in temperature for which they ultimately trip to a very high resistance. In addition, Nabell et al. teach that first and second fuse elements (105, 106) can be replaced with PTCRs (205, 206) and still meet UL Standards requirements. (See Col. 4, lines 1-12). Therefore, it would have been obvious to incorporate this teaching from Nabell et al. as a means to offer a resettable feature to the first and second fuse elements, thereby decreasing down-time wait for a technician to replace blown fuses. As far as specific values as found in Claims 11 and 18, such values are considered to be obvious as optimization within the Prior Art conditions or through Routine Experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

The new grounds of rejection resulted from Applicant's amendment to Claims 9 and 16.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W. Leja whose telephone number is (571)272-2053. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
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rwl March 30, 2005